

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060325

Luminaire Tested: S124RDR-S1195D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060325
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

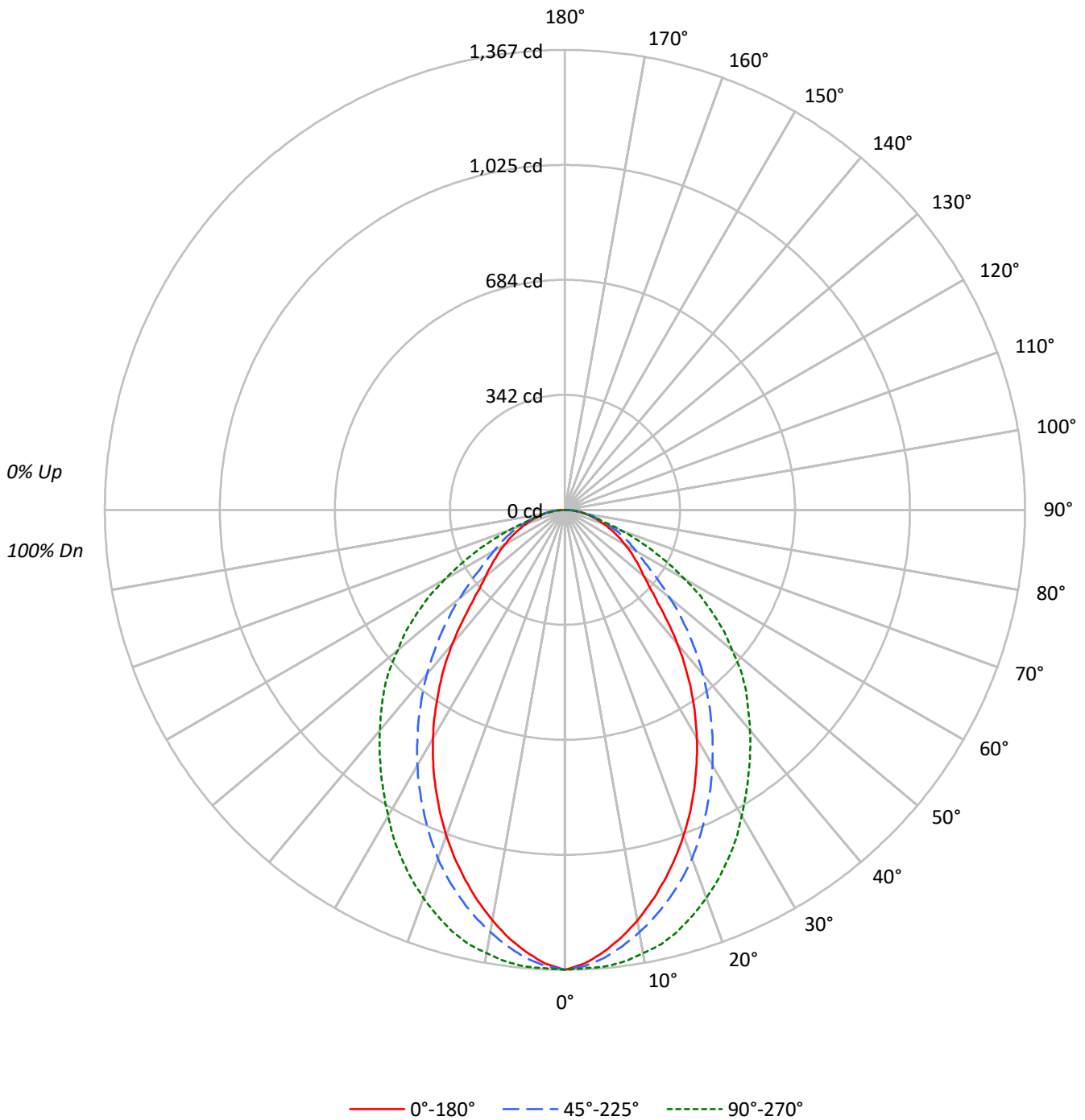
Lumens per Lamp: N/A
Luminaire Lumens: 2488.3 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65	65	65	65	65														
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50	50	50	50	50	50	50														
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41	41	41	41	41	41	41														
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34	34	34	34	34	34	34														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31	31	31	31	31	31	31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11770	11770	11770
5°	11406	11554	11777
10°	10836	11149	11700
15°	10167	10665	11559
20°	9440	10109	11251
25°	8644	9420	10889
30°	7793	8718	10442
35°	6868	7953	10015
40°	5846	7166	9614
45°	4746	6334	9265
50°	4107	5451	8676
55°	3807	4624	8044
60°	3553	4170	7056
65°	3327	3912	5868
70°	3102	3608	4436
75°	2954	3337	3194
80°	2772	3055	2698
85°	2549	2836	2124

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9265 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.2	5.1
10°-20°	339.2	13.6
20°-30°	463.1	18.6
30°-40°	485.2	19.5
40°-50°	420.0	16.9
50°-60°	315.6	12.7
60°-70°	203.5	8.2
70°-80°	104.3	4.2
80°-90°	31.2	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	928.5	37.3
0°-40°	1413.7	56.8
0°-60°	2149.3	86.4
0°-90°	2488.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2488.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1320	1340	1337	1347	1362	123
15°	1140	1169	1196	1251	1297	320
25°	910	944	991	1069	1146	417
35°	653	691	756	857	953	407
45°	390	430	520	648	761	307
55°	254	262	308	440	536	228
65°	163	166	192	232	288	162
75°	89	99	100	99	96	94
85°	26	30	29	27	22	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1366.8	1366.8	1366.8	1366.8	1366.8
2.5°	1349.6	1366.8	1356.8	1359.6	1363.9
5°	1319.5	1339.6	1336.7	1346.7	1362.5
7.5°	1282.3	1303.7	1308.0	1331.0	1353.9
10°	1239.3	1263.6	1275.1	1309.5	1338.1
12.5°	1192.0	1217.8	1237.8	1280.8	1322.4
15°	1140.4	1169.1	1196.3	1250.7	1296.6
17.5°	1087.4	1116.1	1151.9	1212.1	1263.6
20°	1030.1	1061.6	1103.2	1166.2	1227.8
22.5°	971.4	1004.3	1048.7	1117.5	1189.1
25°	909.8	944.1	991.4	1068.8	1146.1
27.5°	848.1	882.5	935.5	1017.2	1101.7
30°	783.7	819.5	876.8	965.6	1050.2
32.5°	719.2	757.9	816.6	911.2	1001.4
35°	653.3	690.6	756.5	856.7	952.7
37.5°	587.4	626.1	696.3	803.7	904.0
40°	520.1	560.2	637.5	750.7	855.3
42.5°	452.7	495.7	577.4	696.3	806.6
45°	389.7	429.8	520.1	647.6	760.8
47.5°	342.4	369.6	462.8	600.3	709.2
50°	306.6	320.9	406.9	548.7	647.6
52.5°	279.4	289.4	355.3	492.8	597.4
55°	253.6	262.2	308.0	439.8	535.8
57.5°	230.7	235.0	272.2	388.3	477.1
60°	206.3	210.6	242.1	332.4	409.7
62.5°	184.8	187.7	217.8	279.4	348.1
65°	163.3	166.2	192.0	232.1	288.0
67.5°	143.3	147.6	167.6	189.1	229.2
70°	123.2	131.8	143.3	153.3	176.2
72.5°	106.0	114.6	120.3	123.2	124.6
75°	88.8	98.9	100.3	98.9	96.0
77.5°	71.6	80.2	80.2	77.4	74.5
80°	55.9	63.0	61.6	58.7	54.4
82.5°	41.5	45.8	44.4	41.5	37.2
85°	25.8	30.1	28.7	27.2	21.5
87.5°	12.9	17.2	15.8	14.3	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)